

BEFORE THE POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

INTALCO ALUMINUM CORPORATION,)	
)	
Appellant,)	PCHB No. 89-42
)	
v.)	
)	FINAL FINDINGS OF FACT,
STATE OF WASHINGTON, DEPARTMENT)	CONCLUSIONS OF LAW
OF ECOLOGY,)	AND ORDER
)	
Respondent.)	

This matter, the appeal of a civil penalty of \$6,000 for alleged violation of oil and grease limitations of an NPDES (National Pollutant Discharge Elimination System) permit came on for hearing on January 11, 1990, in Lacey, Washington, before the Pollution Control Hearings Board: Wick Dufford, Presiding, Judith A. Bendor, Chair, and Harold S. Zimmerman, Member.

Matthew Cohen, Attorney at Law, represented appellant Intalco. Tanya Barnett, Assistant Attorney General, represented respondent Department of Ecology. The proceedings were recorded by Bibi Carter of Gene Barker and Associates.

1 Witnesses were sworn and testified. Exhibits were admitted and
2 examined. From the testimony heard and exhibits examined, the Board
3 makes the following

4 FINDINGS OF FACT

5 I

6 Intalco Aluminum Corporation operates a primary aluminum smelting
7 plant on the shores of the Strait of Georgia near Ferndale,
8 Washington. In connection with the processes at the plant, certain
9 discharges of wastes are made to the adjacent marine receiving waters.

10 II

11 The Department of Ecology is a state agency authorized to issue
12 permits in satisfaction of federal and state laws regarding the
13 discharge of wastes to public waters. On June 28, 1985, Ecology
14 issued NPDES and State Waste Discharge Permit No. WA 000295-0,
15 containing various conditions and limitations regarding Intalco's
16 discharges. This permit was in effect during the month of October
17 1988.

18 III

19 Intalco's permit limits oil and grease discharges in process
20 wastewater to a daily maximum of 15 milligrams per liter (mg/L), with
21 the additional restriction that 10 mg/L not be exceeded more than
22 three days per month. The daily maximum is a concentration limitation.

23 The permit also limits the daily average discharge of oil and
24 grease from plant processes to 91 kilograms per day (kg/day). The
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1 daily average is a mass limitation.

2 IV

3 For purposes of determining compliance with the oil and grease
4 limits, the permit requires monitoring at the process wastewater
5 outlet daily by a single grab sample. The permit further provides:

6 Samples and measurements taken to meet the
7 requirements of this permit shall be representative of
8 the volume and nature of the discharge. (Emphasis
added.)

9 V

10 Intalco obtains its daily grab sample for oil and grease using a
11 one liter glass bottle which is dipped into the waste stream below the
12 surface. The volume of the process wastewater discharge per day is
13 around five million gallons, or in excess of 19 million liters. The
14 assumption is that the oil and grease in the one liter sample is
15 representative of the concentration of oil and grease in the entire
16 wastewater discharge at the moment the sample is taken.

17 The daily maximum, under the permit, is simply the value of the
18 representative grab sample taken on any day.

19 VI

20 The daily average is obtained by multiplying the weight of oil
21 and grease in each day's grab sample by the entire daily process
22 wastewater outflow and converting to kilograms. The daily values,
23 thus derived, are averaged over a month's time. The assumption here
24 is that the average of these daily figures for a month is
25

1 representative of the mass of oil and grease being discharged into the
2 receiving wasters, even though the amount for any given day represents
3 an extrapolation from a single one liter grab to a figure for the
4 total amount discharged from the plant over 24 hours.

5 For any day, then, any overestimate in the sample will be
6 magnified over 19 million times when the mass oil and grease figure
7 for that day is derived.

8 VII

9 Enforcement of the permit system depends primarily on
10 self-reporting. For each month, Intalco submits a discharge
11 monitoring report (DMR) to Ecology setting forth the results of the
12 effluent monitoring it has carried out over the period. The DMR
13 consists of printed forms and explanatory material. At the bottom of
14 the printed forms is a signed statement of recognition that "knowingly
15 making a false certification on this report or supporting documents"
16 is a criminal offense. The form explicitly invites explanation of
17 high readings.

18 VIII

19 On November 14, 1988, Intalco sent Ecology its DMR for October.
20 The printed form showed a daily maximum for oil and grease of 93 mg/L
21 and a daily average of 122 kg/day.

22 The accompanying explanatory material stated that 93 mg/L was
23 recorded in a daily grab sample taken at 8:30 a.m. on October 26,
24 1988, and that after the result was received, a second grab was taken
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1 that afternoon at 3:00 p.m. which showed 1 mg/L.

2 The report also stated that the two main tributary streams to the
3 discharge were sampled the same day at 8:12 a.m. and showed 0 mg/L and
4 5 mg/L.

5 As to the 93 mg/L sample, the report stated:

6 There was no oil source found that would have
7 contributed to this high value. One possibility was
8 that some floating oil, which gets trapped in the
9 discharge pershall flume and is skimmed off daily,
could have become trapped in the sample container
which may have inflated the value.

10 The extraordinarily high reading for October 26, was noted as the
11 reason the daily average for the month was exceeded.

12 IX

13 When Ecology received Intalco's October DMR, it was already aware
14 of the unusual value derived from the morning grab sample on October
15 26. The plant's technical manager had called the agency and reported
16 the sampling result as soon as he became aware of it.

17 After the DMR came in, the Ecology engineer charged with
18 enforcement at Intalco talked by phone to the plant's technical
19 manager about the October 26 oil and grease reading and asked if any
20 upsets in the facility which might account for it had been reported.
21 The agency engineer asked particularly about the cast house.

22 Intalco's technical manager replied that the company had no
23 evidence of an upset. Ecology sent no one to the plant to
24 investigate. Ecology received no reports of any oil observed in the
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1 receiving water at the discharge point.

2 X

3 On January 26, 1989, Ecology sent Intalco a Notice of Penalty
4 Incurred and Due (No. DE 88-386). The notice imposed a civil penalty
5 of \$6,000 alleging two violations of the NPDES permit--exceedance of
6 the daily maximum for oil and grease on October 26, 1988, and
7 exceedance of the daily average for oil and grease for the month of
8 October.

9 On February 3, 1989, Intalco filed an Application for Relief from
10 Penalty with Ecology which expanded somewhat on prior explanations.
11 The application asserted that if oil had been discharged at the
12 reported 93 mg/L level "it is certain that an oil sheen would have
3 been visible at the point of discharge and this was not the case at
14 the time of the sample."

15 The application also stated: "Never before has a value of this
16 order been detected even during periods when we could trace operating
17 problems." The application noted that the samples recorded for the
18 day before and the day after October 26 were 3 mg/L and 1 mg/L.

19 XI

20 On March 6, 1989, Ecology issued a Notice of Disposition on
21 Application for Relief from Penalty affirming the \$6,000 penalty
22 assessed against Intalco. Thereafter, Intalco filed an appeal with
23 this Board on April 4, 1989, which was assigned our cause number PCHB
24 89-42. The basis for the appeal was the assertion that the reported
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1 grab sample taken at 8:30 a.m. on October 26, 1988, was
2 non-representative.

3 XII

4 The sampling point for process wastewater at Intalco's plant is
5 in a parshall flume, a rectangular cement structure through which the
6 effluent flows, and which acts as a weir for measuring the discharge
7 to the outfall diffuser. In the cement enclosure--approximately 25
8 feet long, 3 1/2 feet wide--the effluent is several feet deep and
9 flowing with a discernible current.

10 At the upstream end of the enclosure, oily residues (primarily
11 castor oil from the cast house) collect in a back eddy on the surface
12 of the water and are manually skimmed off every eight hours. The
13 surface collection of these weir skimmings is decidedly
14 non-representative of oil and grease in the discharged effluent,
15 reaching concentrations perhaps above 100,000 mg/L. However,
16 occasionally small fragments can detach from the weir skimmings and
17 float down the flume.

18 On October 26, 1988, the lab attendant taking the 8:30 a.m. oil
19 and grease sample in the flume noticed a larger than usual
20 accumulation of weir skimmings upstream of the area where he was
21 making his grab. It appeared to him that some of these skimmings were
22 washing downstream. After he took his sample he could tell there was
23 oil in it. He contacted his supervisor and advised him that he had
24 taken what might be a problem sample. He believed the source of the
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1 oil was the weir skimmings.

2 XIII

3 The lab attendant is a college graduate with 21 years of
4 experience in laboratory work, including 15 years of taking water
5 samples like the one in question.

6 Shortly after 8:00 a.m. on October 26, he had taken oil and
7 grease samples at each of two upstream points which are tributary to
8 the final effluent stream. At one, containing the outflow from the
9 cast house the measurement was 0 mg/L. At the other, containing
10 discharges from the secondary treatment and carbon plants, the
11 concentration was 5 mg/L.

12 These two streams cover the only likely sources in the plant for
13 the addition of significant oil and grease to the effluent.

14 XIV

15 Under Intalco's procedure, there is no discretion regarding what
16 samples are analyzed. They are all analyzed; none are discarded.
17 However, when the lab attendant received the results of analysis of
18 the 8:30 sample from the parshall flume he was surprised. The oil and
19 grease concentration was substantially higher than any reading he had
20 ever before gotten from that location.

21 He immediately returned to the parshall flume and took another
22 sample. This second grab taken at about 3:00 p.m., showed oil and
23 grease at 1 mg/L.

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XV

About 9:30 a.m. on the morning of October 26, upon receiving the lab attendant's verbal report of a possible problem sample, the plant's environmental manager contacted the cast house and asked if anything unusual had occurred there which might lead to an oil discharge. A couple of hours later he received a report back indicating that no problems had been encountered in the cast house.

XVI

The 93 mg/L reading from October 26 was more than a little abnormal. It exceeded all other samples at that sampling point for the entire year of 1988 by seven times. No other oil and grease violations above the 15 mg/L limit were measured in 1988. The average sample throughout the year was around 2 to 3 mg/L.

XVII

The 93 mg/L concentration translates by extrapolation to 2096 kilograms of oil and grease discharged for a day. This is over 36 times as high as the average at Intalco for all other days in the month. If the October 26 mass discharge calculation had been the same as this average, Intalco would easily have complied with the daily average limit of the permit for October.

XVIII

Ecology conducts annual NPDES inspections at Intalco. The inspection reports for both 1987 and 1988 indicate no deficiencies in the sampling procedures or analytical methods used. Samples taken at

1 each of these inspections were separately analyzed and the results
2 compared. The correlation in both cases was very high. For the dates
3 in question all values for process wastewater oil and grease were
4 between 1 and 3 mg/L.

5 XIX

6 In assessing the penalty at issue, Ecology did not rely strictly
7 on the values filled in on the printed DMR form. It made an effort to
8 look behind the numbers and evaluated the explanations offered
9 verbally and in writing by Intalco. The agency decided to issue the
10 penalty and, later, to reaffirm it because of dissatisfaction with
11 Intalco's explanations.

12 XX

13 Based on the entire record before this Board, we find it more
14 likely than not that the second grab sample taken on October 26, 1988,
15 showing 1 mg/L for process wastewater oil and grease was
16 representative of the oil and grease discharged that day and that the
17 first such sample, showing 93 mg/L was non-representative.

18 XXI

19 Any Conclusion of Law which is deemed a Finding of Fact is hereby
20 adopted as such.

21 From these Findings of Fact, the Board reaches the following

22 CONCLUSIONS OF LAW

23 I

24 The Board has jurisdiction over the parties and the subject
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1 matter. Chapters 43.21B and 90.48 RCW.

2 II

3 RCW 90.48.144 authorizes the assessment of civil penalties of up
4 to \$10,000 per day for violations of the terms of waste discharge
5 permits, which include permits issued in satisfaction of both state
6 and federal law. See RCW 90.48.262.

7 Intalco contested liability, but chose not to contest the amount
8 of the penalty in this case. Therefore, evidence concerning any
9 record of other permit violations was not offered.

10 III

11 As a threshold issue, Ecology contends that Intalco should be
12 precluded from attacking the discharge monitoring results the company
13 provided.

14 Under the particular facts of this case we disagree. Here the
15 issue is not the broad question of whether data reported through
16 self-monitoring ought generally to be given conclusive effect. Rather
17 it is the narrow issue of whether, when such data presents an internal
18 conflict, this Board may entertain extrinsic evidence to resolve the
19 conflict. We conclude that we may do so.

20 IV

21 In this case, the total package comprising the DMR for the month
22 of October included the results of two grab samples for oil and grease
23 for process wastewater effluent on October 26. These results were
24 accompanied by explanatory material asserting, in effect, that one of
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1 the samples was non-representative.

2 The permit links compliance to the acquisition of a
3 representative sample. In these circumstances, we hold that the Board
4 properly entertained evidence relative to which of the samples should
5 be regarded as representative.

6 In reaching our decision, we viewed the presentation of the DMR
7 by Ecology as making a prima facie case for a permit violation. The
8 burden then shifted to Intalco to show that the sample relied on by
9 Ecology should not be the basis for a violation and that the other
10 sample should be used to evaluate compliance.

11 V

12 Under the present reporting arrangement between Intalco and
13 Ecology all data is reported. Differences over the validity of data
14 are discussed. Problems are looked at in the light of complete rather
15 than selective disclosure. We believe that this approach promotes the
16 integrity of the self-monitoring system.

17 However, if after full communication, the parties are at odds
18 over interpretation of the data reported, then the permittee should be
19 able to bring that matter to this Board. Otherwise the resolution of
20 such matters as the representativeness of a sample is left solely to
21 the unreviewable discretion of Ecology.

22 VI

23 Within the state administrative process, the legislature has
24 established this Board to conduct trial-type adjudications for
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1 determining de novo, facts upon which enforcement actions rest. RCW
2 43.21B.110, 160. The Board's hearings are intended as a procedural
3 safeguard against the standardless exercise of discretion. See,
4 Yakima County Clean Air Authority v. Glascam Builders, 85 Wn.2d 255,
5 534 P.2d 33 (1975).

6 No federal or state statute or regulation has been cited to us
7 which would prevent our entertaining the limited threshold issue we
8 have looked at here.

9 VII

10 Having decided that this Board can resolve the question of which
11 sample is representative, we have done so in our Findings.

12 Since, as a matter of fact, the representative oil and grease
13 sample was 1 mg/L rather than 93 mg/L we decide that no violation of
14 the oil and grease standards--either daily maximum or daily
15 average--occurred at Intalco on October 26, 1988.

16 XII

17 Any Finding of Fact which is deemed a Conclusion of Law is hereby
18 adopted as such.

19 From these Conclusions of Law, the Board enters the following
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ORDER

Notice of Penalty Incurred and Due No. 88-386 is reversed and the penalty assessed therein is vacated.

DONE this 13th day of April, 1990.

POLLUTION CONTROL HEARINGS BOARD

Wick Dufford
WICK DUFFORD, Presiding

Judith A. Bendor
JUDITH A. BENDOR, Chair

Harold S. Zimmerman
HAROLD S. ZIMMERMAN, Member